

## LIST OF SPECIES OF NEOTROPICAL MEGALOPTERA (NEUROPTERIDA)

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*Abstract.*—The 63 known species and subspecies of Neotropical dobsonflies and alderflies (Neuropterida: Megaloptera) are listed. Synonymy, authors, bibliographic references, and distribution of species by country and generally by province or state are included. Six localities, each of specimens thought to belong to new species, are also provided.

*Resumen.*—Se proporciona una lista de las 63 especies y subespecies conocidas de megalópteros (Neuropterida: Megaloptera) neotropicales. Se incluye sinonimia, autores, referencias bibliográficas y la distribución de las especies por país y generalmente también por provincia o estado. Se enumeran seis localidades de ejemplares que se cree pertenecen a especies nuevas para la ciencia.

*Key Words:* Corydalidae, Sialidae, dobsonflies, fishflies, alderflies, Megaloptera, Neotropics, taxonomy, species list

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Megaloptera is a relatively primitive endopterygote (holometabolous) group closely related to Raphidioptera and Planipennia (Neuroptera *s. s.*). Despite being a small group, of approximately 200 (Evans 1972) to 300 species (New and Theischinger 1993) worldwide, the alpha taxonomy of the Neotropical megalopteran fauna has only recently reached a satisfactory level of knowledge. Since the most recent species list for the Neotropics (Penny 1977) does not include results of subsequent revisions, it seems useful to provide a current list of the species with references to relevant literature (i.e., original species descriptions, taxonomic revisions, significant distribution data). Species synonymy according to the most recent revision is included, as are species distributions by country and province or state if the latter were published or could be obtained. Ordering of taxa is alphabetical. Several records (*Corydalus* and *Platy-*

*neuromus*) are given as “sp. 1, sp. 2”, etc., and for these locality data are given. This is in the hope that new material may be collected and the identity of these possibly new species might be established. Following Penny (1977), species of Sialidae are included in *Protosialis*. However, their exact generic position is rather uncertain at this time, as the group needs revision (e.g., Ross [1937] synonymized *Protosialis* under *Sialis*). In accordance to Cabrera and Wilink’s (1980) limits of the Neotropical Region, the list includes all species and subspecies recorded south of the United States–Mexico border. The corydalid species *Corydalus cornutus* (L.) and *Dysmicohermes* sp. have been collected in Texas, close to or at the Mexican border (Contreras-Ramos 1995b, 1998), so there is the possibility they occur in Mexico (Tamaulipas). Davis (1903) included Mexico as part of the distribution range of *Nigronia fasciatus*

(Walker). However, the southernmost distribution otherwise recorded for this species is in Florida (Hazard 1960).

The 63 valid species and subspecies in this list, contrast to the 46 species recorded for the Megaloptera of America north of Mexico (Evans and Neunzig 1996; 43 species [3 *Corydalus* spp. missing] in Penny et al. 1997). The highest diversity in the Neotropics lies within Corydalinae (46 spp., compared to 9 species and subspecies of Chauliodinae and 8 species of Sialidae), whereas Sialidae is the most diverse group in the Nearctic (24 spp., compared to 18 species of Chauliodinae and 4 species of Corydalinae). Four species (1 Chauliodinae and 3 Corydalinae) are shared between both regions.

### Family Corydalidae

#### Subfamily Chauliodinae (fishflies)

##### Genus *Archichauliodes* Weele 1909

1. *Archichauliodes chilensis* Kimmins.  
*Archichauliodes chilensis* Kimmins 1954;  
Flint 1973; Penny 1977.

Distribution.—CHILE: Arauco, Coquimbo, Curicó, Malleco, Santiago, Valdivia, Valparaíso.

2. *Archichauliodes pinares* Flint.  
*Archichauliodes pinares* Flint 1973.

Distribution.—CHILE: Concepción.

##### Genus *Neohermes* Banks 1908

3. *Neohermes filicornis* (Banks).  
*Chauliodes filicornis* Banks 1903b.  
*Neohermes filicornis* (Banks): Weele 1910;  
Flint 1965; Evans 1972; Contreras-Ramos 1991a, 1997.

Distribution.—UNITED STATES: Arizona, California, New Mexico; MEXICO: Baja California, Sonora.

##### Genus *Nothochauliodes* Flint 1983

4. *Nothochauliodes penai* Flint.  
*Nothochauliodes penai* Flint 1983.

Distribution.—CHILE: Maule.

##### Genus *Protochauliodes* Weele 1909

5. *Protochauliodes bullocki* Flint.  
*Protochauliodes bullocki* Flint 1973.

Distribution.—CHILE: Bío-Bío, Linares, Malleco, Ñuble.

6. *Protochauliodes cinerascens cinerascens* (Blanchard).

*Chauliodes cinerascens* Blanchard 1851.  
*Neohermes cinerascens* (Blanchard): Banks 1908.

*Protochauliodes cinerascens* (Blanchard):  
Weele 1910; Kimmins 1954.  
*Protochauliodes cinerascens cinerascens*  
(Blanchard): Flint 1973.

Distribution.—CHILE: Curicó, Linares, Ñuble, O'Higgins, Santiago, Talca.

7. *Protochauliodes cinerascens fumipennis* Flint.  
*Protochauliodes cinerascens fumipennis*  
Flint 1973.

Distribution.—CHILE: Concepción.

8. *Protochauliodes cinerascens reedi* Kimmins.  
*Protochauliodes reedi* Kimmins 1954.  
*Protochauliodes cinerascens reedi* Kimmins:  
Flint 1973.

Distribution.—CHILE: Valparaíso.

9. *Protochauliodes humeralis* (Banks).  
*Neohermes humeralis* Banks 1908.  
*Protochauliodes humeralis* (Banks): Weele 1910;  
Flint 1973.

Distribution.—CHILE: Arauco, Bío-Bío, Cautín, Concepción, Malleco, Maule.

#### Subfamily Corydalinae (dobsonflies)

##### Genus *Chloronia* Banks 1908

10. *Chloronia absona* Flint.  
*Chloronia absona* Flint 1992; Contreras-Ramos 1995a.

Distribution.—COSTA RICA: Alajuela, Guanacaste, Limón, San José.

11. *Chloronia antilliensis* Flint.

*Chloronia antilliensis* Flint 1970; Penny and Flint 1982; Contreras-Ramos 1995a.

Distribution.—DOMINICA.

12. *Chloronia banksiana* Penny and Flint.

*Chloronia banksiana* Penny and Flint 1982; Contreras-Ramos 1995a.

*Chloronia bogotana* (not Weele, misidentification); Banks 1943.

Distribution.—VENEZUELA: Aragua, Carabobo.

13. *Chloronia bogotana* Weele.

*Chloronia bogotana* Weele 1909; Penny and Flint 1982; Flint 1991; Contreras-Ramos 1995a.

Distribution.—BOLIVIA: La Paz; COLOMBIA: Cundinamarca; ECUADOR: Zamora-Chinche; PERU: Cuzco, Huánuco.

14. *Chloronia convergens* Contreras-Ramos.

*Chloronia convergens* Contreras-Ramos 1995a.

Distribution.—ECUADOR: Pichincha.

15. *Chloronia corripiens* (Walker).

*Hermes corripiens* Walker 1858.

*Neuromus corripiens* (Walker): MacLachlan 1869.

*Neuromus winthemi* Davis 1903.

*Chloronia meridionalis* Weele 1909.

*Chloronia winthemi* (Davis): Weele 1910.

*Chloronia ocellaris* Navás 1934a.

*Chloronia corripiens* (Walker): Penny and Flint 1982; Contreras-Ramos 1995a.

Distribution.—BRAZIL: Espirito Santo, Minas Gerais, Rio de Janeiro, Santa Catarina, São Paulo.

16. *Chloronia gloriosoi* Penny and Flint.

*Chloronia gloriosoi* Penny and Flint 1982; Flint 1992; Contreras-Ramos 1995a.

Distribution.—COSTA RICA: San José; PANAMA: Chiriquí.

17. *Chloronia hieroglyphica* (Rambur).

*Neuromus hieroglyphica* Rambur 1842.

*Hermes hieroglyphicus* (Rambur): Walker 1853.

*Corydalus hieroglyphicus* (Rambur): Hagen 1861.

*Chloronia hieroglyphica* (Rambur): Banks 1908; Penny and Flint 1982; Contreras-Ramos 1995a.

Distribution.—BRAZIL: Amazonas, Pará; FRENCH GUIANA; GUYANA; PERU: Loreto, Madre de Dios.

18. *Chloronia mexicana* Stitz.

*Chloronia mexicana* Stitz 1914; Penny and Flint 1982; Flint 1992; Contreras-Ramos 1995a, 1997.

Distribution.—COSTA RICA: Alajuela, Guanacaste, Heredia; GUATEMALA: Alta Verapaz, Suchitepequez; MEXICO: Chiapas, Morelos, San Luis Potosí, Tamaulipas, Veracruz.

19. *Chloronia mirifica* Navás.

*Chloronia mirifica* Navás 1925a; Penny and Flint 1982; Flint 1992; Contreras-Ramos 1995a, 1997.

*Chloronia hieratica* Navás 1928a.

Distribution.—COLOMBIA: Meta; COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas, San José; ECUADOR: Napo, Pichincha; GUATEMALA: Alta Verapaz, Izábal, Solola; MEXICO: Oaxaca, Veracruz; PANAMA: Chiriquí, Colón; PERU: Huánuco.

20. *Chloronia osae* Flint.

*Chloronia osae* Flint 1992; Contreras-Ramos 1995a.

Distribution.—COSTA RICA: Puntarenas.

21. *Chloronia pallida* (Davis).

*Neuromus pallidus* Davis 1903.

*Chloronia pallidus* (Davis): Penny 1977.

*Chloronia pallida* (Davis): Penny and Flint 1982; Contreras-Ramos 1995a, 1997.

Distribution.—MEXICO: Chihuahua, Guerrero, Jalisco, Michoacán, Morelos, Nayarit.

22. *Chloronia plaumanni* Penny and Flint.  
*Chloronia plaumanni* Penny and Flint  
1982; Contreras-Ramos 1995a.

Distribution.—BRAZIL: Rio Grande do Sul, Santa Catarina.

23. *Chloronia zacapa* Contreras-Ramos.  
*Chloronia zacapa* Contreras-Ramos 1995a.

Distribution.—GUATEMALA: Izábal, Zacapa.

Genus *Corydalis* Latreille 1802

24. *Corydalis affinis* Burmeister.  
*Corydalis affinis* Burmeister 1839; Weele  
1910 (in part); Penny 1977; Contreras-  
Ramos 1998.

*Corydalis nubilis* (not Erichson, misiden-  
tification): Weele 1910; Banks 1943;  
Penny 1982.

*Corydalis* sp.: Glorioso 1981.

*Corydalis* spec. nov.: Geijskes 1984.

Distribution.—ARGENTINA: Chaco, Misiones; BOLIVIA: Beni; BRAZIL: Acre, Amapá, Amazonas, Mato Grosso, Pará, Rondônia, Roraima, São Paulo; COLOMBIA: Antioquia, Boyacá, Chocó, Cundinamarca, Tolima; ECUADOR: Napo, Pichincha, Sucumbíos; FRENCH GUIANA: GUYANA; PARAGUAY; PERU: Cuzco, Loreto, Madre de Dios; VENEZUELA: Guárico.

25. *Corydalis amazonas* Contreras-Ramos.  
*Corydalis amazonas* Contreras-Ramos  
1998.

Distribution.—BRAZIL: Amazonas, Rondônia.

26. *Corydalis armatus* Hagen.  
*Corydalis armata* Hagen 1861.  
*Corydalis armatus* Hagen 1861.

*Corydalis armatus* Hagen 1861: Weele  
1910 (in part); Stitz 1914 (in part); Navás  
1920a, 1934a, 1935; Penny 1977 (in  
part), 1982 (in part); Glorioso 1981 (in  
part); Contreras-Ramos 1998.

*Corydalis armata* n. sp.: Davis 1903 (in  
part).

*Corydalis quadrispinosus* Stitz 1914.  
*Corydalis peruvianus* (not Davis, misiden-  
tification): Banks 1943 (in part).

Distribution.—ARGENTINA: Catamarca, Jujuy, Salta, Tucumán; BOLIVIA: Chuquisaca, Cochabamba, La Paz, Santa Cruz; COLOMBIA: Boyacá, Cundinamarca, Valle del Cauca; ECUADOR: Bolívar, Chimborazo, El Oro, Esmeraldas, Imbabura, Loja, Los Ríos, Napo, Pichincha, Tungurahua, Zamora Chinchipe; PERU: Ayacucho, Cuzco, Huánuco, Junín, Lima, Pasco; VENEZUELA: Aragua, Mérida, Tachira.

27. *Corydalis arpi* Navás.  
*Corydalis arpi* Navás 1936; Penny 1977,  
1982; Contreras-Ramos 1993, 1998.

Distribution.—BRAZIL: Amazonas, Rondônia; VENEZUELA: Territorio Federal Amazonas.

28. *Corydalis australis* Contreras-Ramos.  
*Corydalis australis* Contreras-Ramos 1998.  
*Corydalis affinis* (not Burmeister, misiden-  
tification): Weele 1910 (in part); Penny  
1977 (in part); Glorioso 1981.

Distribution.—ARGENTINA: Misiones; BRAZIL: Minas Gerais, Rio Grande do Sul, Santa Catarina; URUGUAY: Artigas.

29. *Corydalis batesii* MacLachlan.  
*Corydalis batesii* MacLachlan 1868; Davis  
1903; Geijskes 1984; Contreras-Ramos  
1998.

*Corydalis batesi* MacLachlan: Weele 1910;  
Stitz 1914 (in part); Kimmins 1970; Pen-  
ny 1977, 1982; Glorioso 1981.

Distribution.—BOLIVIA: Cochabamba, Santa Cruz; BRAZIL: Amazonas, Pará; COLOMBIA: Antioquia; ECUADOR: Napo; FRENCH GUIANA; GUYANA; SURINAME; PERU: Madre de Dios; VENEZUELA: Territorio Federal Amazonas.

30. *Corydalis bidenticulatus* Contreras-Ramos.  
*Corydalis bidenticulatus* Contreras-Ramos  
1998.

*Corydalus lutea* (not Hagen, misidentification): Glorioso 1981 (in part).

*Corydalus* sp. B: Contreras-Ramos 1997.

Distribution.—UNITED STATES: Arizona; MEXICO: Colima, Guerrero, Jalisco, Michoacán, Morelos, Nayarit, Oaxaca, Sinaloa, Sonora.

31. *Corydalus cephalotes* Rambur.

*Corydalus cephalotes* Rambur 1842: Weele 1910 (in part); Stitz 1914 (in part); Penny 1977 (in part), 1982 (in part); Contreras-Ramos 1998.

*Corydalus affinis* (not Burmeister, misidentification): Walker 1853; Hagen 1861.

*Neuromus cephalotes* (Rambur): Davis 1903 (in part).

*Corydalus intricatus* Navás 1921: Penny 1977.

Distribution.—BRAZIL: Rio de Janeiro.

32. *Corydalus clauseni* Contreras-Ramos.

*Corydalus clauseni* Contreras-Ramos 1998.

Distribution.—COLOMBIA: Valle del Cauca; COSTA RICA: Heredia; ECUADOR: Cañar, Loja, Napo, Pichincha, Tungurahua.

33. *Corydalus colombianus* Contreras-Ramos.

*Corydalus colombianus* Contreras-Ramos 1998.

*Corydalus ecuadorianus* (not Banks, misidentification): Glorioso 1981 (in part).

Distribution.—COLOMBIA: Valle del Cauca.

34. *Corydalus diasi* Navás.

*Corydalus diasi* Navás 1915: Penny 1977; Contreras-Ramos 1998.

*Corydalus finoti* Navás 1921: Penny 1977.

Distribution.—ARGENTINA: Misiones, BRAZIL: Bahia, Ceará, Goiás, Minas Gerais, Rio Grande do Sul, São Paulo; PARAGUAY.

35. *Corydalus ecuadorianus* Banks.

*Corydalus ecuadorianus* Banks 1948: Pen-

ny 1977; Glorioso 1981 (in part); Contreras-Ramos 1998.

Distribution.—ECUADOR: Napo, Tungurahua.

36. *Corydalus flavicornis* Stitz.

*Corydalus armatus flavicornis* Stitz 1914: Penny 1977.

*Corydalus nevermanni* Navás 1934b: Penny 1977; Banks 1943.

*Corydalus camposi* Navás 1935: Penny 1977.

*Corydalus armatus* (not Hagen, misidentification): Banks 1943 (in part).

*Corydalus peruvianus* (not Davis, misidentification): Banks 1943 (in part).

*Corydalus flavicornis* Stitz: Glorioso 1981; Contreras-Ramos 1998.

Distribution.—COLOMBIA: Antioquia, Meta, Santander; COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas, San José; ECUADOR: Guayas, Esmeraldas, Loja, Los Ríos, Napo, Pastaza, Pichincha, Tungurahua; EL SALVADOR; GUATEMALA; HONDURAS; PANAMA: Chiriquí; PERU: Huánuco, Junín, Pasco; VENEZUELA: Aragua, Bolívar, Lara, Mérida, Portuguesa, Zulia.

37. *Corydalus flinti* Contreras-Ramos.

*Corydalus flinti* Contreras-Ramos 1998.

Distribution.—VENEZUELA: Territorio Federal Amazonas.

38. *Corydalus hecate* MacLachlan.

*Corydalus hecate* MacLachlan 1866: Kimmins 1970.

*Neuromus cephalotes* (not Rambur, misidentification): Davis 1903 (in part).

*Corydalus cephalotes* (not Rambur, misidentification): Weele 1910 (in part); Stitz 1914 (in part); Penny 1977 (in part), 1982 (in part); Glorioso 1981 (in part).

*Corydalus raynundoii* Navás 1920b.

*Corydalus sallei* Navás 1920b.

*Corydalus hecate* MacLachlan: Contreras-Ramos 1998.

Distribution.—BRAZIL: Distrito Federal, Espírito Santo, Minas Gerais, São Paulo; PERU; VENEZUELA: Distrito Federal.

39. *Corydalus holzenthali* Contreras-Ramos.

*Corydalus holzenthali* Contreras-Ramos 1998.

Distribution.—BOLIVIA: Cochabamba, La Paz; PERU: Pasco.

40. *Corydalus ignotus* Contreras-Ramos.

*Corydalus ignotus* Contreras-Ramos 1998.

Distribution.—FRENCH GUIANA.

41. *Corydalus imperiosus* Contreras-Ramos.

*Corydalus imperiosus* Contreras-Ramos 1998.

*Corydalus tridentatus* (not Stitz, misidentification): Glorioso 1981 (in part).

Distribution.—ARGENTINA: Misiones.

42. *Corydalus longicornis* Contreras-Ramos.

*Corydalus longicornis* Contreras-Ramos 1998.

Distribution.—ARGENTINA: Catamarca, Salta; BOLIVIA: Chuquisaca, Cochabamba, Santa Cruz; ECUADOR: Zamora Chinchipe.

43. *Corydalus luteus* Hagen.

*Corydalus luteus* Hagen 1861; Davis 1903 (in part); Penny 1977 (as *nomen nudum*).

*Corydalus luteus* Hagen: Weele 1910 (as junior synonym of *C. cornutus* [L.]); Contreras-Ramos 1997, 1998.

*Corydalus luteus* Hagen: Glorioso 1981 (in part).

*Corydalus crassicornis* MacLachlan 1868; Davis 1903; Banks 1907; Kimmins 1970.

*Corydalus crassicornis* (MacLachlan): Weele 1910 (as junior synonym of *C. cornutus* [L.]).

*Corydalus inamabilis* MacLachlan 1868; Davis 1903; Banks 1907; Kimmins 1970.

*Corydalus inamabilis* (MacLachlan): Weele 1910 (as junior synonym of *C. cornutus* [L.]).

*Corydalus armatus laevicornis* Stitz 1914; Penny 1977.

Distribution.—BELIZE: COSTA RICA: Alajuela, Guanacaste, Heredia, Limón, Puntarenas, San José; EL SALVADOR; UNITED STATES: Texas; GUATEMALA: Alta Verapaz, Chiquimula, Escuintla, Guatemala, Sacatepéquez, San Marcos, Santa Rosa, Suchitepequez, Zacapa; HONDURAS; MEXICO: Chiapas, Coahuila, Hidalgo, Nuevo León, Oaxaca, Querétaro, San Luis Potosí, Tabasco, Tamaulipas, Veracruz; NICARAGUA; PANAMA: Zona del Canal, Chiriquí, Colón.

44. *Corydalus magnus* Contreras-Ramos.

*Corydalus magnus* Contreras-Ramos 1998.

*Corydalus lutea* (not Hagen, misidentification): Glorioso 1981 (in part).

*Corydalus* sp. M: Contreras-Ramos 1997.

Distribution.—COSTA RICA: Alajuela, Guanacaste, Puntarenas; EL SALVADOR; GUATEMALA: Alta Verapaz, Baja Verapaz, Suchitepequez; MEXICO: Chiapas, Puebla, San Luis Potosí, Veracruz.

45. *Corydalus neblinensis* Contreras-Ramos.

*Corydalus neblinensis* Contreras-Ramos 1998.

Distribution.—VENEZUELA: Territorio Federal Amazonas.

46. *Corydalus nubilis* Erichson.

*Corydalus nubila* Erichson 1848: Hagen 1861 (in part); Davis 1903 (in part).

*Corydalus nubilis* Erichson: Stitz 1914; Penny 1977 (in part); Glorioso 1981; Geijskes 1984; Contreras-Ramos 1998.

*Corydalus nevermanni* (not Navás, misidentification): Penny 1982.

*Corydalus titschacki* Navás 1928b: Penny 1977.

Distribution.—BRAZIL: Amazonas, Pará, Roraima; FRENCH GUIANA; GUYANA; VENEZUELA: Territorio Federal Amazonas.

47. *Corydalus parvus* Stitz.

*Corydalus parvus* Stitz 1914: Penny 1977; Contreras-Ramos 1998.

*Corydalus armatus* (not Hagen, misidentification): Glorioso 1981 (in part).

Distribution.—ECUADOR: Pastaza, Zamora Chinchipe; PERU: Cuzco, Huánuco, Pasco.

48. *Corydalus peruvianus* Davis.

*Corydalus peruviana* Davis 1903.

*Corydalus armatus* (not Hagen, misidentification): Weele 1910 (in part); Stitz 1914 (in part); Penny 1977 (in part), 1982 (in part); Glorioso 1981 (in part).

*Corydalus crassicornis* (not MacLachlan, misidentification): Banks 1914.

*Corydalus primitivus fera* Navás 1927: Penny 1977.

*Corydalus peruvianus* Davis: Banks 1943 (in part); Contreras-Ramos 1997, 1998.

Distribution.—ARGENTINA: Jujuy, Salta, Tucumán; BOLIVIA: Chuquisaca, Cochabamba, La Paz, Tarija; COLOMBIA: Antioquia, Cundinamarca, Meta, Putumayo, Valle del Cauca; COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Limón, Puntarenas, San José; ECUADOR: Cotopaxi, Guayas, Los Ríos, Morona Santiago, Napo, Pastaza; Pichincha; Sucumbíos; GUATEMALA: Escuintla, Izábal, Quiché, San Marcos; MEXICO: Chiapas, Oaxaca, Puebla, Tabasco, Veracruz; PANAMA: Bocas del Toro, Chiriquí, Colón, Darién; PERU: Amazonas, Huánuco, La Libertad, Pasco; VENEZUELA: Aragua, Barinas, Distrito Federal, Mérida.

49. *Corydalus primitivus* Weele.

*Corydalus primitivus* Weele 1909: Weele 1910 (in part); Stitz 1914; Navás 1929; Penny 1977, 1982 (in part); Glorioso 1981 (in part), Contreras-Ramos 1998.

Distribution.—ARGENTINA: Catamarca, Jujuy, Salta, Tucumán; BOLIVIA: Santa Cruz.

50. *Corydalus tessellatus* Stitz.

*Corydalus batesi tessellatus* Stitz 1914.

*Corydalus nubila* (not Erichson, misidenti-

fication): Hagen 1861 (in part); Davis 1903 (in part); Banks 1943.

*Corydalus bolivari* Banks 1943: Glorioso 1981; Contreras-Ramos 1993.

*Corydalus tessellatus* Stitz: Penny 1977 (incorrect locality); Contreras-Ramos 1998.

Distribution.—COLOMBIA; VENEZUELA: Aragua, Distrito Federal, Mérida, Tachira.

51. *Corydalus texanus* Banks.

*Corydalus texana* Banks 1903a: Penny 1977 (as junior synonym of *C. cornutus* [L.]).

*Corydalus cognata* (not Hagen, misidentification): Banks 1892, 1903b, 1907; Davis 1903; Chandler 1956.

*Neuromus pallidus* (not Davis): Davis 1903 (misabeled photograph).

*Corydalus pallidus* (not Davis): Weele 1910 (invalid combination based on misabeled photograph; as junior synonym of *C. cornutus* [L.]).

*Corydalus cognatus* (not Hagen, misidentification): Weele 1910 (in part; as junior synonym of *C. cornutus* [L.]); Evans 1972 (in part).

*Corydalus texanus* Banks: Weele 1910 (as junior synonym of *C. cornutus* [L.]); Contreras-Ramos 1997, 1998.

*Corydalus cornutus* (not Linnaeus, misidentification): Stitz 1914 (in part); Glorioso 1981 (in part); Hermann and Davis 1991.

*Corydalus similis* Stitz 1914: Banks 1943 (misidentification); Penny 1977 (in part).

*Corydalus constellatus* Navás 1934b: Penny 1977.

Distribution.—UNITED STATES: Arizona, California, Colorado, Nevada, New Mexico, Texas, Utah; GUATEMALA: Baja Verapaz, Chiquimula; MEXICO: Baja California, Baja California Sur, Chiapas, Chihuahua, Colima, Distrito Federal, Guerrero, Jalisco, Michoacán, Morelos, Nayarit, Oaxaca, Puebla, Querétaro, Sinaloa, Sonora, Veracruz.

52. *Corydalus tridentatus* Stitz.

*Corydalus tridentatus* Stitz 1914: Penny

1977; Glorioso 1981 (in part); Contreras-Ramos 1998.

*Corydalus tridentatus nigripes* Stitz 1914.

Distribution.—BRAZIL: Espirito Santo. Paraná, Rio Grande do Sul.

*Corydalus* sp. 1.

*Corydalus* sp. 1 (near *C. affinis* Burmeister): Contreras-Ramos 1998.

Distribution.—BRAZIL: São Paulo: São José dos Campos.

*Corydalus* sp. 2

*Corydalus tesselatus* (not Stitz, misidentification): Banks 1943.

*Corydalus ecuadorianus* (not Banks, misidentification): Glorioso 1981 (in part).

*Corydalus* sp. 2 (near *C. ecuadorianus* Banks): Contreras-Ramos 1998.

Distribution.—COLOMBIA: [Cundinamarca?]: St. [San] Antonio, 2000 m.

*Corydalus* sp. 3.

*Corydalus* sp. 3 (near *C. nubilus* Erichson): Contreras-Ramos 1998.

Distribution.—VENEZUELA: Bolívar: Ciudad Bolívar.

*Corydalus* sp. 4.

*Corydalus* sp. 4 (near *C. tesselatus* Stitz): Contreras-Ramos 1998.

Distribution.—ECUADOR: Sucumbíos: El Reventador, [aprox. 900 m].

*Corydalus* sp. 5.

*Corydalus* sp. 5 (near *C. colombianus* Contreras-Ramos): Contreras-Ramos 1998.

Distribution.—ECUADOR: Pichincha: Palmeras.

Genus *Platyneuromus* Weele 1909

53. *Platyneuromus honduranus* Navás.

*Platyneuromus soror hondurana* Navás 1928b.

*Platyneuromus auritus* Kimmins 1928.

*Platyneuromus honduranus* Navás: Glorioso and Flint 1984; Contreras-Ramos 1997.

Distribution.—GUATEMALA: Alta Verapaz, El Petén, Izábal; HONDURAS: Atlántida, Cortés; MEXICO: Chiapas.

54. *Platyneuromus reflexus* Glorioso and Flint.

*Platyneuromus reflexus* Glorioso and Flint 1984; Contreras-Ramos 1997.

Distribution.—GUATEMALA: Alta Verapaz; MEXICO: Chiapas.

55. *Platyneuromus soror* (Hagen).

*Corydalis soror* Hagen 1861.

*Neuromus soror* (Hagen): Davis 1903.

*Neuromus (Chloronia) soror* (Hagen): Banks 1908.

*Platyneuromus soror* (Hagen): Weele 1909, 1910; Stitz 1914; Penny 1977; Glorioso 1981; Glorioso and Flint 1984; Contreras-Ramos 1991b, 1997; Contreras-Ramos and Harris 1998.

*Doeringia christel* Navás 1925b.

Distribution.—COSTA RICA: Alajuela, Cartago, Guanacaste, Heredia, Puntarenas, San José; MEXICO: Chiapas, Distrito Federal, Hidalgo, Estado de México, Nuevo León, Oaxaca, Puebla, Querétaro, San Luis Potosí, Tamaulipas, Veracruz; PANAMA: Chiriquí.

*Platyneuromus* sp.

*Platyneuromus* larval form A: Contreras-Ramos and Harris 1998.

Distribution.—MEXICO: Guerrero: 56 km NE Atoyac on road to Puerto del Gallo, 17.417°N, 100.217°W, 1372 m; Sinaloa: 4.83 km W Palmito.

Family Sialidae  
(alderflies)

Genus *Protosialis* Weele 1909

56. *Protosialis bifasciata* (Hagen).

*Sialis bifasciata* Hagen 1861; Davis 1903.

*Protosialis bifasciata* (Hagen): Weele 1910; Penny 1977.

Distribution.—CUBA.

57. *Protosialis bimaculata* Banks.



*Protosialis bimaculata* Banks 1920: Penny 1977, 1981 [1982].

Distribution.—BOLIVIA: La Paz.

58. *Protosialis brasiliensis* Navás.

*Protosialis brasiliensis* Navás 1936: Penny 1977, 1981 [1982].

Distribution.—BRAZIL: São Paulo.

59. *Protosialis chilensis* (MacLachlan).

*Sialis chilensis* MacLachlan 1870: Davis 1903; Flint 1973.

*Protosialis chilensis* (MacLachlan): Weele 1910; Penny 1977.

Distribution.—CHILE: Arauco, Concepción, Llanquihue, Malleco, O'Higgins, Talca, Valdivia.

60. *Protosialis flammata* Penny.

*Protosialis flammata* Penny 1981 [1982].

Distribution.—BRAZIL: Amazonas.

61. *Protosialis flavicollis* (Enderlein).

*Sialis flavicollis* Enderlein 1910.

*Protosialis flavicollis* (Enderlein): Penny 1977, 1981 [1982].

Distribution.—COLOMBIA: Tolima.

62. *Protosialis mexicana* (Banks).

*Sialis mexicana* Banks 1901: Henry et al. 1992.

*Protosialis mexicana* (Banks): Weele 1910; Penny 1977, E. D. Evans (*in litt.*); Contreras-Ramos 1991a.

Distribution.—MEXICO: Chiapas, Veracruz; PANAMA.

63. *Protosialis nubila* Navás.

*Protosialis nubila* Navás 1933: Penny 1977, 1981 [1982].

Distribution.—BRAZIL: Matto Grosso?

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